

CLAIMS

We claim:

The following statement is applicable to all Claims below.

Our invention is applicable to any machine that is (1) publicly accessible and (2) while in use, its content needs to be protected from other users. Examples are: washer, dryer, microwave oven, and other appliances, devices, equipment that satisfy the requirements (1) and (2).

Claim 1:

- (a) A system to enforce a Protection of Private Property in Public Systems Using Smart Card comprising of a system of: Memory Smart Card (MSC) and Instrumented Machine.
- (b) The machine is instrumented with: Card Acceptance Device, Logic Decision Circuit, Small Persistent Memory, and Electronically lockable door.
- (c) The LDC capability consists of operations: generation of session key, comparison of two keys, lock door, unlock door.

Claim 2:

- (a) A system to enforce a Protection of Private Property in Public Systems Using Smart Card comprising of a system of: Memory Smart Card (MSC) and Instrumented Machine.
- (b) The machine is instrumented with: Card Acceptance Device, Microprocessor Based System (MBS), Small Persistent Memory, and Electronically lockable door.
- (c) The MBS capability consists of operations: generation of session key, comparison of two keys, lock door, unlock door.
- (d) The MBS can be programmed in any of the following languages. It can be programmed in machine language, assembly, or any high level language (currently known or developed in the future) and compiled into executable code.

Claim 3:

- (a) Same as Claim 2.
- (b) Same as Claim 2.
- (c) Same as Claim 2.
- (d) The MBS operates as follows. It runs KVM (a Java Virtual Machine for smart cards) or Java Micro Edition, or any future developed small footprint Java Virtual Machine and executes the application in Java byte codes.

Claim 4:

- (a) A system to enforce a Protection of Private Property in Public Systems Using Smart Card comprising of a system of: Microprocessor Smart Card (CSC) and Instrumented Machine.
- (b) The machine is instrumented with: Card Acceptance Device, Logic Decision Circuit, Small Persistent Memory, and Electronically lockable door.
- (c) The CSC capability consists of operations: generation of session key, comparison of two keys.
- (d) The LDC capability consists of operations: lock door, unlock door.
- (e) The CSC operates as follows. It runs KVM (a Java Virtual Machine for smart cards) and executes a smart card application in Java byte codes